DOCUMENT RESUME

ED 351 403 UD 028 906

AUTHOR Mehan, Hugh; And Others
TITLE Untracking and College Enrollment. Research Report: 4.
INSTITUTION National Center for Research on Cultural Diversity and Second Language Learning, Santa Cruz, CA.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 92
CONTRACT R117G10022
NOTE 25p.; For Report Number 1, see ED 338 098.
AVAILABLE FROM Dissemination Coordinator, National Center for Research on Cultural Diversity and Second Language Learning, Center for Applied Linguistics, 1118 22nd Street, N.W., Washington, DC 20037.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Black Students; *College Attendance; *Disadvantaged Youth; *Enrollment; Graduate Surveys; *Heterogeneous Grouping; *High School Graduates; Hispanic Americans; *Minority Group Children; Outcomes of Education; Program Effectiveness; Program Evaluation; Secondary Education; Track System (Education); Urban Youth; White Students
IDENTIFIERS Language Minorities; *San Diego Unified School District CA

ABSTRACT

A study was done of the success of the San Diego (California) public school detracking program, Advancement Via Individual Determination (AVID), by measuring the students' college enrollment. The AVID program was developed as an alternative to compensatory education and remedial tracking for underachieving high school students, especially those from ethnic and linguistic minority backgrounds. The program placed low- and high-achieving students together in a rigorous academic program while providing students with strong social and academic supports. In particular, one academic period a day was devoted to AVID activities taught by a coordinator trained in collaborative teaching methods, inquiry approaches, and writing-to-learn techniques. The coordinator and aides provided the students with tutorial assistance in their academic subjects. Interviews were conducted with 144 AVID graduates from the classes of 1990 and 1991. Of the participants, 41 percent were Hispanic American, 12 percent were White, 28 percent were African American, and the remaining were of other minority groups. The findings reveal that 50 percent were enrolled in four-year colleges. The local average for four-year college enrollment was 38 percent and the national average was 39 percent. Included are 2 tables, 12 bar graphs, and 48 references. (JB)

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UNTRACKING AND COLLEGE ENROLLMENT

HUGH MEHAN, AMANDA DATNOW,
ELIZABETH BRATTON, CLAUDIA TELLEZ,
DIANE FRIEDLAENDER & THUY NGO

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HUGH MEHAN
AMANDA DATNOW
ELIZABETH BRATTON
CLAUDIA TELLEZ
DIANE FRIEDLAENDER
THUY NGO

UNIVERSITY OF CALIFORNIA SAN DIEGO

NATIONAL CENTER FOR RESEARCH ON CULTURAL DIVERSITY AND
SECOND LANGUAGE LEARNING

1992

This report was prepared with funding from the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education, under Cooperative Agreement No. R117G10022. The findings and opinions expressed here are those of the authors and do not necessarily reflect the positions or policies of OERI.

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Eugene Garcia and Barry McLaughlin, Co-Directors
National Center for Research on Cultural Diversity
and Second Language Learning
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University of California
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ACKNOWLEDGEMENTS

Versions of this paper were presented to the San Diego County Superintendent of Schools, October 1991; the American Anthropological Association, November 1991; Teachers of English to Speakers of Other Languages, March 1992; and the American Educational Research Association, April 1992. This research was funded by grants from the Linguistic Minority Research Project of the University of California and by the Office of Educational Research and Improvement, U.S. Department of Education. Our thanks to the San Diego City Schools, especially John Griffith and Peter Bell, for encouraging this research. We especially appreciate the support of Mary Catherine Swanson and the advice of Lea Hubbard, Nick Maroules, Richard J. Shavelson, Randall Souviney, and Irene Villanueva. Daryl Stermon has given us invaluable computer and statistical assistance.

Untracking and College Enrollment

Abstract

The number of students from linguistic and ethnic minority backgrounds in the United States is expected to increase just as the number of jobs that require higher education is expected to increase. However, students from these minority backgrounds are neither performing in high school well enough nor enrolling in college in sufficient numbers to qualify for the increasing number of jobs that will require baccalaureate degrees.

"Compensatory education" has been the prevailing strategy used in U.S. public schools to deal with the problem of low-achieving students. San Diego's Advancement Via Individual Determination (AVID) "untracking" program was developed as an alternative to compensatory education and remedial tracking for underachieving high school students, especially those from ethnic and linguistic minority backgrounds. Untracking is the practice of placing low- and high-achieving students together in a rigorous academic program. AVID places low-achieving students in college preparatory classes and provides them with a strong system of social and academic supports. This report examines the educational consequences of the AVID untracking program as measured by students' college enrollment.

AVID graduates from ethnic and linguistic backgrounds that are traditionally underrepresented in U.S. colleges and universities are enrolling in college in numbers that exceed local and national averages. Interviews with 144 AVID graduates from the classes of 1990 and 1991 revealed that 50% were enrolled in four-year colleges. The local average for four-year college enrollment was 38%, and the national average was 39%.

This study, although preliminary, reveals the power of rigorous academic programs to improve the academic achievement of previously underachieving students. If these findings stand up under closer scrutiny, we can conclude that rigorous academic programs are more effective than compensatory education programs in meeting the needs of low-achieving students.

INTRODUCTION

Students from linguistic and ethnic minority backgrounds are expected to constitute an increasing percentage of the U.S. population through the early years of the 21st century (Carter & Wilson, 1992; Pelavin & Kane, 1990). At the same time, jobs that require higher education are expected to increase in number (CSAW, 1990; NCEE, 1987). The current census data, however, show that students from linguistic and ethnic minority backgrounds are not enrolling in college in sufficient numbers to prepare them for the increasing number of jobs that will require baccalaureate degrees.

More Black and Hispanic students have been enrolling in college, but not at the same rate as White students. In 1970, 26% of Black high school graduates nationwide enrolled in college; this figure reached a high of 34% in 1976, declined to 31% in 1989, and rose to 33% in 1990. In 1972 (the first year data were available), 26% of Hispanic high school graduates enrolled in college, and 29% enrolled in 1990. Although these college enrollment figures are improving, they are still well below those of White students: 33% of White high school graduates enrolled in college in 1970, and 39% enrolled in 1989 (Carter & Wilson, 1992).

This imbalance is also found at the University of California at San Diego (UCSD). Students from some linguistic and ethnic backgrounds, notably Black, Hispanic, and Native American, are underrepresented in our classrooms. The percentage of Asian students, however, enrolled at the nine campuses of the University of California (UC) and at UCSD is double the percentage of Asians in the California high school population. Similarly, the percentage of White students attending UC and UCSD is greater than the percentage of White students in the California high school population. For Black and Hispanic students, however, the percentage enrolled at UC and UCSD is only one third the percentage of Black and Hispanic students in the California high school population (see Table 1).

Table 1: The Ethnic Distribution of Students in the University of California, UCSD, and CA High School Populations

Ethnic Group	CA H.S. Population*	UC Systemwide**	UCSD Undergraduate**
White	49.2%	54.0%	59.0%
Black	9.0%	4.6%	2.8%
Hispanic	30.7%	11.5%	10.2%
Asian	7.6%	(19.1%)	(15.4%)
Korean		4.2%	2.8%
Japanese		2.5%	2.3%
Chinese		8.2%	6.2%
Indochinese		4.2%	4.1%
Filipino	2.2%	3.5%	4.2%
Native American	0.8%	0.9%	0.8%

SOURCES: *for the California high school population: California State Department of Education, 1990; **for the UC systemwide student population and the UCSD student population: Office of the President, 1990.

NOTE: Figures do not round to 100% because not all students state their ethnic identity on university forms.

Not only are ethnic and linguistic minority students underrepresented at UCSD, but once they enroll here, they do not perform as well academically as their middle-income and White peers. The grades of Black, Hispanic, Native American, and Filipino students are lower than those of White and Asian students. Furthermore, students who come from low-income families are three times as likely to encounter academic difficulty (e.g., be placed on probation, drop out, or not progress normally toward their degrees) (Morell, 1990).

If the enrollment in colleges and universities of students from underrepresented backgrounds does not increase, and if these same students do not obtain college degrees, the nation will not have

achieved the educational equity it has sought. Neither will it have the skilled work force it needs to ensure a healthy and competitive economy. Nor will it have the well educated and thoughtful citizenry it needs for a vibrant and energetic democracy. Indeed, if the current college enrollment trends continue, the economic disparities that exist among ethnic groups in the United States will become further entrenched.

Compensatory Education for Low-Achieving Students

Compensatory education has been the prevailing strategy employed by public schools throughout the United States to deal with the problem of underachieving linguistic and ethnic minority youth. Compensatory education received its impetus in the mid-1960s when Congress passed the Elementary and Secondary Education Act, one of the many legislative shots fired in the war against poverty. Compensatory education programs addressed the poor school performance of America's low-income students. The most notable of these was the Head Start Program. Adopting a sports metaphor, Head Start accepted uncritically America's belief in life as a race, a competition in which people get ahead by hard work and individual effort. What made Head Start unique was its acknowledgement that White middle- and upper-income kids had an advantage in the race for success. In order to level the playing field for poor and minority groups, the government provided considerable sums of federal money to school districts. Schools across the United States instituted programs to compensate for the presumed deficiencies in the family and cultural arrangements of poor and minority students.

In general, compensatory education has worked on a remedial principle. Students who have been unsuccessful in school are placed into special programs or "tracks." The curriculum in compensatory education programs is often reduced in scope, content, and pace and is delivered to students in simpler form at a slower pace. The hope is that underachieving students will develop skills that will enable them to be promoted to regular education or even college bound programs or tracks.

Despite their commendable goal of attempting to compensate for perceived cultural deficiencies through remedial instruction, tracking systems that segregate underachieving students in special programs have been criticized for contributing to the very problems they were set up to solve. Students placed in remedial tracks seldom catch up to their peers (Oakes, 1985; Rosenbaum, 1986). They seldom have the benefit of equivalent curriculum or instruction (Cicourel & Mehan, 1983; Oakes, Gamoran, & Page, in press; Page & Valli, 1990), and they often suffer the stigmatizing consequences of negative labeling (Mehan, Meihls, & Hertweck,1985; Mercer, 1974).

Untracking Low-Achieving Students: An Alternative to Compensatory Education

Sensitive to the criticisms leveled against tracking and compensatory education, educators have struggled in recent years to find alternative methods to educate low-achieving students. One alternative being explored in San Diego County is "untracking." In the San Diego version of untracking, low-achieving students are placed in rigorous academic classes along with their high-achieving peers.

The educational consequences of untracking students will be the focus of this paper. We will compare the college enrollment of San Diego students who have participated in untracking programs with the college enrollment of other San Diego students and with the national average. By doing so, we will gain some insight into the value of organizing schools to emphasize an academic curriculum as an alternative to compensatory education for low-achieving students.

The idea of untracking low-achieving students was introduced to San Diego in 1980 at Clairemont High, a predominantly White school, by Mary Catherine Swanson, a member of the English Department. She proposed untracking as a way to educate minority students bussed to Clairemont from predominantly ethnic minority schools in South-

east San Diego under a court-ordered desegregation decree. Unwilling to segregate Black and Hispanic students into a separate, compensatory program, the Clairemont faculty placed the bussed students in regular "college prep" classes. The program adopted the acronym AVID, which stands for Advancement Via Individual Determination. Its expressed goals are to motivate and prepare underachieving students from linguistic and ethnic minority groups to perform well in high school and to seek a college education.

AVID soon spread beyond this one school. Madison High School adopted AVID in 1984. In 1986, Swanson moved to the San Diego County Office of Education, charged with the responsibility of implementing the AVID untracking model countywide. Three other schools in the San Diego Unified School District (Point Loma, Lincoln, and San Diego High Schools) adopted the AVID model between 1986 and 1989. By 1991, eleven other city schools (Mira Mesa, Mission Bay, University City, Hoover, Serra, Morse, La Jolla, Twain, Kearny, Crawford, and Garfield), two schools in nearby districts (Oceanside High and Southwest High), 50 high schools in San Diego County, and 84 high schools outside the county had introduced AVID programs.

AVID coordinators select students to participate in the program. Low-income ethnic and linguistic minority students with average to high CTBS (California Test of Basic Skills) scores, but low junior high school grades, are eligible for AVID. Once these high-potential/low-performance students are identified, their parents are advised. Those parents who agree to support their children's participation sign contracts to have their children participate in AVID as soon as they enroll in high school.

One academic period a day is designated for AVID activities. This course is taught by the AVID coordinator, who has been trained in collaborative teaching methods, inquiry approaches, and writing-to-learn techniques. The course is also staffed with paid aides, including college students in teacher education programs and former AVID students. The AVID coordinator and aides provide the AVID students with tutorial assistance in their academic subjects.

Methods and Data

In this paper, we will examine the college enrollment of students who graduated from the AVID untracking experiment in 1990 and 1991. We define college enrollment, following Carter & Wilson (1992), as the percentage of high school seniors who attend college upon graduation. It is a more accurate measure than "college participation," which Carter & Wilson define as the percentage of all persons 18-24 who attend college.

In 1990 and 1991, 253 students who had participated in the AVID program for three years graduated from 14 high schools in the San Diego City Schools (SDCS) system. We confined our analysis to students who had participated in this untracking experiment for three years, because our research has shown that an extended exposure to college prep courses is necessary for academic success (Mehan, 1991). SDCS kindly supplied us with the Cumulative School Records (CSRs) of the 253 AVID students. We used information from the CSRs to contact the students by telephone. We reached students from the class of 1991 at the end of the summer after they graduated from high school; the class of 1990 was interviewed during the Winter of 1991.

The primary purpose of the interview was to determine the students' current activities. In order to place this information in context, we obtained information about the students' families (e.g., parents' education, languages spoken in the home) and about their high school and AVID experiences. As of this date, we have contacted 144 of these graduates and inquired about their activities since they graduated from high school. The 56% response rate is considered to be good in interview studies of this nature. It gives us a measure of confidence in the reliability of our findings.

We have chosen to operationalize college enrollment via post-graduation interviews because they provide an accurate measure, although they are time consuming. Our measures of college enrollment are

likely to be more conservative than reports based on students' projected plans, which suffer from idealizations and inflation.

To determine the relative success of the AVID untracking experiment, we compared the college enrollment rates of AVID students to the college enrollment rates of all students from the San Diego City Schools (Bell, 1990) and to an estimate of the national average for college enrollment (Carter & Wilson, 1992). We make these comparisons with some reservations, however, because the national and local data are not exactly comparable to our AVID data. The local data, from the San Diego City Schools (Bell, 1990), capture the college enrollment of the high school graduating class of 1984, the last year that SDCS collected information of this sort. The national data are from the American Council on Education (ACE) (Carter & Wilson, 1992). They are based on census data and report on graduating classes from 1970 through 1990, but they do not include the students who graduated in 1991. Furthermore, the ACE report presents aggregate data on the college enrollment of only Anglos, Blacks, and Latinos; it does not present aggregate data on Filipinos, Japanese, Chinese, Koreans, Native Americans, Vietnamese, or Cambodians.

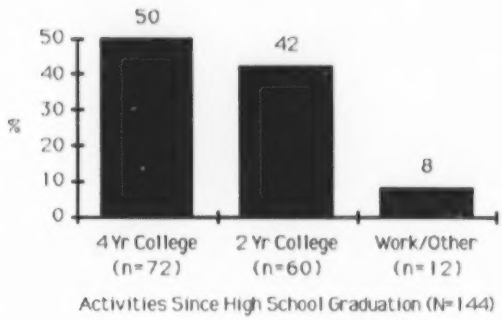
TRACKING THE UNTRACKING EXPERIMENT IN SAN DIEGO

Now we will examine the educational consequences of placing low-achieving students in college bound courses with their high-achieving peers. We will compare the college enrollment of AVID students who graduated in 1990 and 1991 to the college enrollment of students who graduated in 1984 from a number of SDCS high schools and in 1990 from high schools around the United States.

The College Enrollment of AVID Students

Figure 1 shows that 72 of the 144 students in our population (50%) report enrolling in four-year colleges, 60 (42%) report enrolling in two-year or junior colleges, and the remaining 12 students (8%) say they are working or doing other things, such as church service, traveling, or volunteer work. Of the 72 students attending four-year colleges, 32 (44%) are enrolled in colleges within the California State University (CSU) system, 19 (26%) are enrolled in colleges in the University of California system, and the remaining 21 students are enrolled in a variety of private universities in and out of California. Most of the UC and CSU enrollees have stayed close to home; 11 of the 19 (58%) UC enrollees attend UCSD, and 28 of the 32 (88%) CSU enrollees attend SDSU.

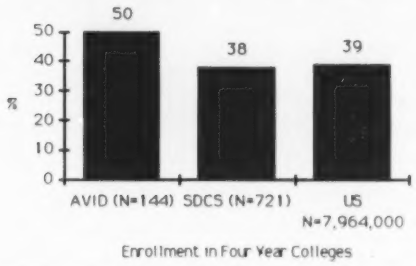
Figure 1: The College Enrollment of AVID Students



Enrollment in Four-Year and Two-Year Colleges: Local and National Comparisons

The AVID four-year college enrollment rate of 50% is higher than both the local average and the national average. Bell (1990) surveyed 721 students who graduated from San Diego high schools in 1984 (the last year for which the City Schools have information of this sort). He found that 38% of that class went on to four-year colleges, 16% attended two-year colleges, and 47% reported working or doing other things. The American Council on Education reported that 39% of the 20 million students who graduated from U.S. high schools in 1990 enrolled in four-year colleges. This means that AVID sends nearly one third more students to four-year colleges than the local and national averages. See Figure 2.

Figure 2: Enrollment of AVID, SDCS, and U.S. Students in Four-Year Colleges



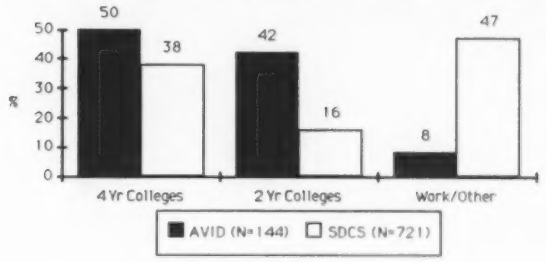
AVID: graduated 1990, 1991 SDCS: graduated 1984 U.S.: graduated 1990

The 50% figure for enrollment of AVID graduates in four-year colleges is important because students from underrepresented groups nationwide are not going to four-year colleges in large numbers, although the number of jobs requiring a four-year college education is increasing (CSAW, 1990; NCEE, 1987). In fact, students from all ethnic and socioeconomic groups are enrolling more often in two-year colleges than they are enrolling in four-year colleges. From 1978 to 1988, two-year college enrollments increased by 21%, while enrollments at four-year colleges increased by only 14% (Carter & Wilson, 1991).

The accelerated increase in two-year college enrollment accompanied by the slower increase in four-year college enrollment is also troubling because few students transfer from the former to the latter. Even though they say they plan to transfer to four-year colleges, once students from minority backgrounds get to community colleges, they often pull in their aspirations. This has led some observers to say that community colleges perform a "cooling out" function (Clark, 1960; Erickson, 1975; Karabel, 1977), especially for students from minority backgrounds. The AVID untracking experiment, then, provides a model for increasing students' preparation for four-year colleges by avoiding the gatekeeping barrier erected at the community college level.

If we combine two-year and four-year college attendance, the AVID college enrollment rate is even more impressive: 92% of AVID students report attending some sort of college after they complete high school, whereas only 54% of SDCS students go on to either a four-year or a two-year college. See Figure 3.

Figure 3: The Post-High-School Activities of AVID and SDCS Students



COLLEGE ENROLLMENT BY ETHNICITY: LOCAL AND NATIONAL COMPARISONS

In this section, we will describe the college enrollment rates of AVID students by ethnic group, and we will compare college enrollment by ethnicity at the local and national levels.

Ethnic designations give headaches to researchers investigating academic achievement. Categories are used differently by different research groups. For some, the category "Hispanic" or "Latino" includes people born in the United States or Mexico, but not those born in Latin or South America; for others, all these groups are included in the same category. In either case, the designation seems arbitrary because these groups have little common cultural history and are more or less geographically separated.

It is important to distinguish among Hispanics based on place of birth because there is some evidence to suggest that U.S.-born Hispanics have a different educational and economic record than recent immigrants from Mexico and Central America (Villanueva, 1990). When the earnings of U.S.-born Mexican-American men are analyzed separately from those of Mexican immigrants, Chavez (1991) claims that a different picture emerges than when these two groups are lumped together. On the average, the weekly earnings of U.S.-born Mexican-

American men are about 83% of those of non-Hispanic White men, while the weekly earnings of Mexican-born immigrants are closer to 60% of non-Hispanic Whites. A similar problem arises when recent immigrants are grouped with U.S.-born Mexican-Americans when computing educational attainment statistics, because recent immigrants have higher dropout rates and lower high school completion rates than U.S.-borns. Only one half of Mexican immigrants have completed seven or more years of schooling, and only 28% have completed 12 or more years, because most of these immigrants came to the United States as young adults, after they completed their formal education in Mexico (Chavez, 1991). The Hispanic category becomes more confusing when immigrants from Central America are included, because they have a different psychological profile (Suarez-Orasco, 1989), and until 1980, more immigrated from the professional than the working classes (Chavez, 1991).

In some reports, Pacific Islanders, Koreans, Japanese, Chinese, Vietnamese, Cambodians, Laotians, and Thais are lumped together as "Asians," whereas in others, the last four groups are designated "Indochinese." Like the Hispanic designation, both of these categories obscure cultural differences and differences in socioeconomic status at the time of immigration. The Japanese and Chinese who have migrated to the United States have done so at different times and under different circumstances than the Vietnamese, Thais, and Cambodians. The Vietnamese, in turn, have migrated to the United States under different circumstances at different times. More of those who arrived on California's shores after the fall of Saigon came from middle-income families than those arriving in the last decade (Rumbaut & Ima, 1988). A failure to take this fact into account reinforces the stereotype of the academically successful Vietnamese, which masks the educational difficulties of recent immigrants.

Even though we are aware of the limitations associated with prevailing ethnic categories, we are constrained to use them. We must use Hispanic or Latino rather than U.S.-born Mexican or Mexican-born Hispanic, because national, state, and local reports do not make these finer distinctions. Partially out of exasperation with this confusing inconsistency, we will use certain expressions interchangeably: "African-American" with "Black," "Hispanic" with "Latino," and "White" with "Anglo."

Because both the San Diego City Schools and the American Council on Education report college enrollment for Anglos, Blacks, and Latinos, we can make both local and national comparisons. Because we do not have national data for Filipinos, Vietnamese, and Laotians, we will not analyze the college enrollment patterns of these groups.

The Ethnic Distribution of AVID Students

The ethnicity of the 144 AVID students we have interviewed is shown in Table 2.

TABLE 2: THE ETHNICITY OF AVID STUDENTS

Ethnicity	N		%
Hispanic	59		41
White	17		12
Black	41		28
Asian	5		3
Native American	1		0.7
Pacific Islander	1		0.7
Filipino	8		6
Indochinese	12		8
Total	144	≈	100 %

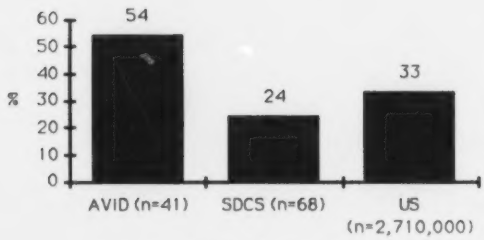
In the following discussion, we will not include Pacific Islanders, Native Americans, or Asian students because there are not enough students from these ethnic groups for systematic analysis. (Each group comprises less than 5% of the sample.) Furthermore, we have been unable to find comparable national data on these ethnic groups.

The College Enrollment of Black Students

Figure 4 shows that 54% of Black students who participated in AVID for three years enrolled in four-year colleges, whereas only 24% of the Black stu-

dents who graduated from SDCS high schools went on to four-year colleges. The national average is slightly higher than the SDCS average. These data indicate that Black AVID students are enrolling in college at more than twice the local average and more than one and a half times the national average.

Figure 4: The Enrollment of Black Students in Four-Year Colleges

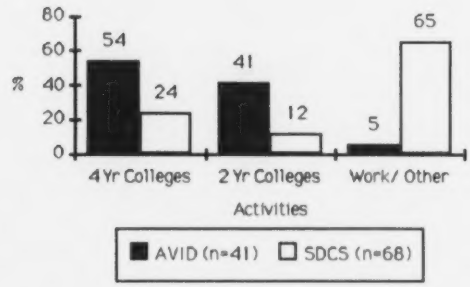


A large number of students nationally are enrolling in the nation's historically Black colleges and universities. In 1990, approximately 17% of African-Americans in college were enrolled in historically Black colleges and universities (Carter & Wilson, 1992). We are seeing a similar trend among Black students in San Diego: 20% of Black graduates from the AVID classes of 1990 and 1991 enrolled in historically Black colleges and universities.

AVID's college enrollment rate is important because of the gap nationwide between Whites and Blacks in college attendance. In 1990, 33% of all African-American high school graduates were enrolled in college, compared to 39% of White high school graduates. This 6% difference in the college enrollment rate has been fairly constant during the last decade and indicates that African-Americans have made relatively little progress in achieving parity in college participation. In fact, the gap between Black and White college enrollment has widened since the 1970s (Carter & Wilson, 1992).

The college enrollment rate for Black AVID students is even more impressive when we add two-year college enrollment into the equation. See Figure 5.

Figure 5: The Post-High-School Activities of Black Students

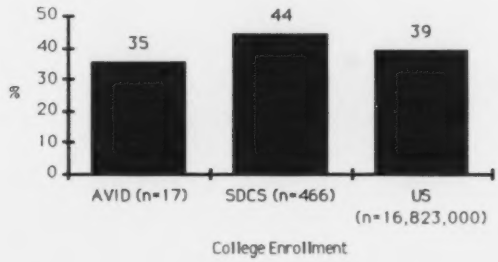


Of the Black students who participated in AVID, 95% enrolled at either a four-year or a two-year college. Only 5% went to work after graduation from high school. By comparison, 36% of the Black students who graduated from San Diego high schools in 1984 went to two- or four-year colleges, and 65% went directly to work.

The College Enrollment of Anglo Students

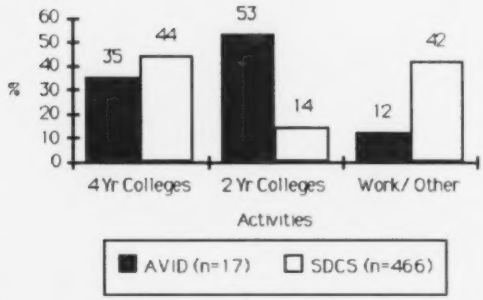
Figure 6 shows that 35% of the Anglo students who participated in AVID for three years went to four-year colleges. This rate is lower than the 1984 SDCS average of 44% and the 1990 national average of 39%.

Figure 6: The Enrollment of White Students in Four-Year Colleges



This picture changes somewhat when we take two-year colleges into account; 88% of White AVID students attend some kind of college after high school, whereas only 58% of White SDCS students enroll in either a four-year or a two-year college after graduation. See Figure 7.

Figure 7: The Post-High-School Activities of White Students

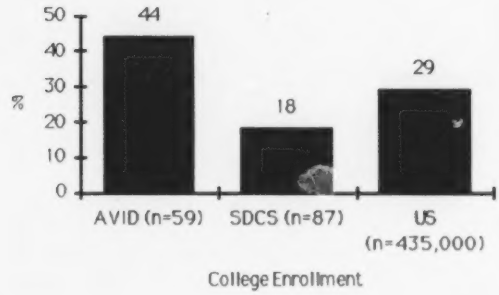


The College Enrollment of Hispanic Students

Hispanics have made only modest gains in college enrollment in the past decade. While the overall *number* of Hispanics enrolled in the nation's colleges and universities has increased since the 1970s, their college enrollment *rate* may be declining. Between 1988 and 1990, the total number of Hispanic students enrolled in college rose by 11% from 680,000 to 758,000 students (Carter & Wilson, 1992). But the rate of enrollment has declined since 1976. In 1972, 25.8% of the Hispanics who graduated from high school went on to college. In 1975 and 1976, this figure increased to 36%, but declined again to 29% in 1990 (Carter & Wilson, 1991). Furthermore, more Hispanic students attend two-year colleges than four-year colleges. As of 1988 (the last year for which this information is available), 56% of Hispanic students enrolling in college went to two-year colleges (Carter & Wilson, 1991).

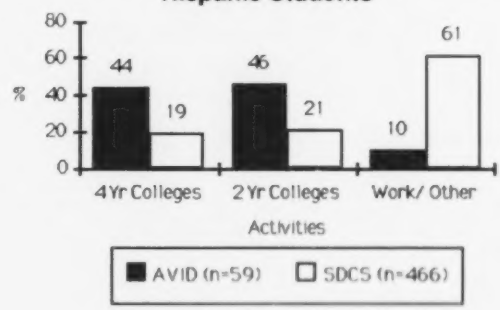
By contrast, the Hispanic students who participated in AVID enrolled in four-year colleges at more than twice the rate of San Diego City Schools students. Hispanic AVID graduates are also ahead of the national average: 44% of Hispanic AVID students enrolled in four-year colleges, whereas the national average for Hispanics is 29%. (See Figure 8.) This finding is especially impressive in light of the decrease in the national rate of Hispanic college enrollment.

Figure 8: The Enrollment of Hispanic Students in Four-Year Colleges



The college enrollment rate of Hispanic students in AVID is even more significant when we take two-year colleges into account: 90% of the Hispanic students who participated in AVID enrolled in either a four- or a two-year college. This means that only 10% went to work directly after completing high school. These college enrollment rates are higher than those from the SDCS; only 39% of Hispanic students who graduated from high schools in the San Diego district in 1984 reported going on to either a four-year or a two-year college (Bell, 1990), with 61% going directly to work. See Figure 9.

Figure 9: The Post-High-School Activities of Hispanic Students



WHAT MAKES UNTRACKING WORK?

The results of this admittedly preliminary investigation suggest that untracking increases the col-

lege enrollment of previously low-achieving students. At this point we want to speculate on the reasons for this success. We think that the success of untracking has to do with the cultural dimensions of schooling, especially the relationship between implicit socialization and explicit instruction. Before we examine that idea, let us examine the influence of background characteristics.

The Influence of Background Characteristics

Two factors that have traditionally been influential in student success are ethnicity and socioeconomic status. Minority students do not do as well in school as White students, and low-income students do not do as well as more economically advantaged students. Because the connection between these background characteristics and school performance is so strong (Center for Education Statistics, 1986; Coleman, et al., 1966; Haycock & Navarro, 1988; Jencks et al., 1972), it is important to see if these factors are influential in our data before we move on to consider more subtle cultural factors.

Ethnicity. The average four-year college enrollment rate for the students in the San Diego untracking experiment is 50%; the figure for Hispanics is 44%, for Blacks 54%. The four-year college enrollment figure for Whites is the lowest, 35%.

These figures, although tabulated on a small sample of data, suggest that students from underrepresented linguistic and ethnic minority groups respond positively to a rigorous academic program. Furthermore, these data suggest that AVID is equally successful with students from a variety of minority groups, neither encouraging nor discouraging any particular minority group disproportionately. AVID does not seem to be as successful with White students, however, a finding which will require further investigation.

The four-year college enrollment rate of AVID students is important in light of recent arguments about minority group membership as a determiner of school success (Erickson, 1987; Foley 1990; Ogbu, 1987). Ogbu (1987) has suggested that the poor academic performance of Blacks, Hispanics, and other "involuntary minority groups" may be due to a pattern of resistance in which students from involuntary minority groups reject the achievement ideology of the majority group with its accompanying maxims to work and study hard. If we continue to find that Hispanics and Blacks do well in college prep courses, then we may have a set of circumstances that counters Ogbu's claims that linguistic minority youth are limited because they adopt inappropriate pedagogical strategies. We have to dig deeper, however, to determine why White students who have participated in the AVID untracking experiment do not enroll in four-year colleges in greater numbers.

Socioeconomic factors. SES is normally measured using some combination of parents' occupation, income, and educational level. We do not have direct measures of parents' income and occupation. Our best available indicator is "free and reduced lunch," a program in which the SDCS makes available a hot midday meal on campus to students in low-income brackets. This index of SES suffers from the problems associated with self-selection. Students or their parents must identify themselves if they want to receive a hot meal, which many people feel stigmatizes recipients. As a result, the information reported below may underrepresent the number of students in our population who are from low-income strata.

Figure 10 shows the college enrollment of students in the untracking experiment according to the SES of their parents. Students who come from the lowest socioeconomic strata enroll in four-year colleges in higher proportion than students from higher socioeconomic levels. This surprising finding suggests that students from low-income levels can be served well by an academically challenging curriculum.

When we examine college enrollment in relation to parents' education, we find an equally interesting pattern. Recall that 50% of all AVID students enrolled in four-year colleges after they graduated from high school. Figure 11 shows that students whose parents have taken college courses or graduated from college do not enroll in college in greater

numbers than students whose parents have a high school diploma or less. In fact, students whose parents have only a high school education enroll in college more often (68%) than students whose parents have had college experience (about 50%).

Figure 10: AVID Parents' SES and Students' College Enrollment

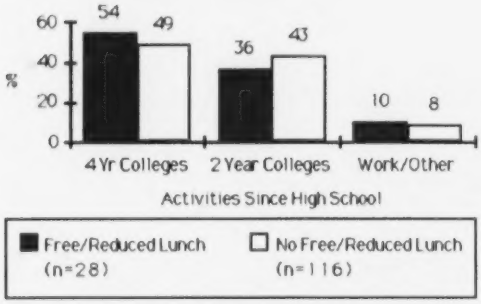
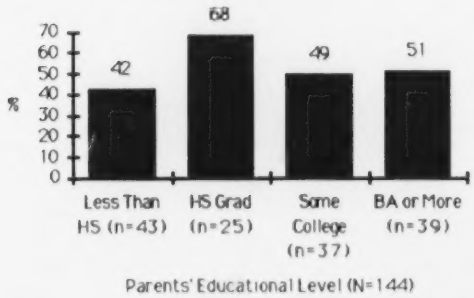


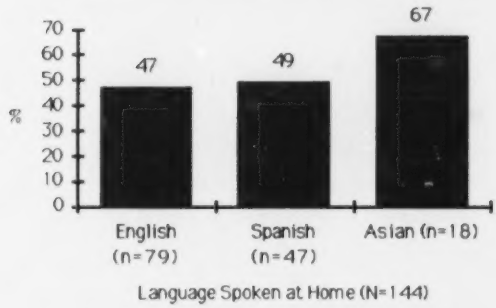
Figure 11: AVID Parents' Education and Students' College Enrollment



We think this is an important finding, because the so-called "reproduction" school of thought on social class and educational attainment (e. g., Bourdieu & Passeron, 1977; Bowles & Gintis, 1976; MacLaren, 1989; MacLeod, 1987; Willis, 1977) suggests that students from low-income families are hampered by structural constraints relative to children from middle- and upper-income families. Our data show that such students are not necessarily trapped by their social circumstances.

Linguistic factors. The idea that students from linguistic and ethnic minority groups respond positively to a rigorous academic program gains support when we consider another characteristic of this population of students: language spoken in the home. See Figure 12.

Figure 12: Language Spoken at Home and AVID Students' College Enrollment



AVID students whose families speak Spanish, Japanese, Korean, or Chinese as their native language enroll in four-year colleges more often than AVID students whose families speak English as their native language. Students who speak one of these Asian languages in the home also attend four-year colleges at a much higher rate than Spanish speakers. These findings are important because they indicate that a student's native language need not be a barrier to success in academically rigorous courses of study.

Summary. Even though we do not have strong measures of SES, we have some indication that background features are not responsible for the impressive college enrollment figures of these untracked students. Therefore, we have some confidence in turning our attention away from materialist and structural explanations to a more subtle culturally based explanation. In the following section, we will explore the idea that the academic success of untracked students is the result of explicit instruction in the hidden curriculum of the school.

Implicit Socialization and the Culture of Schooling

Many commentators on schooling in the United States have noted the importance of the implicit demands of instruction, which have been called the "hidden curriculum" (Apple, 1982; Dreeben, 1968;

Keddie, 1971; Young, 1971) or the "culture of the classroom" (Cazden & Mehan, 1989; Mehan, 1992). Commentators suggest that certain ways of talking, thinking, and acting are demanded by the conventions of schooling. A body of knowledge is supposed to be transmitted from teacher to students. The concern for factually correct information, the use of "known information questions" in verbal instruction, an insistence on text-based knowledge, and the high value attached to naming, labeling, and categorizing information, especially out of context, are part and parcel of this culture. Like other aspects of culture, the cultural features of the classroom are tacit and are therefore learned implicitly.

Study after study has shown a discontinuity between the language of the home and the language of the school — especially when students come from certain low-income and linguistic minority backgrounds. (See Cole & Griffin, 1987, and Cazden & Mehan, 1989, for reviews of this literature.) Middle-income parents are commonly observed to conduct "mini-lessons" with their children in the context of family outings, meals, or bedtime rituals. Parents ask their children to name objects, to classify them, to describe them in a narrative. Parents often ask their children questions to which the parents already have an answer. They even carry on pseudo-conversations with babies, filling in the blanks left open by preverbal children. These are the very discourse practices that dominate the classroom, where text-based knowledge and naming, labeling, and categorizing information out of context are the norm. By contrast, low-income families do not systematically employ known information questions, ask children to give the gist of a bedtime story, or to count the cows along a country road during a family outing. They are much more likely to employ directives than interrogatives and to seek information from children rather than to test their knowledge. In short, their implicit discursive practices do not match the implicit demands of the regular school culture.

Because the language use of middle-income parents matches the often implicit and tacit demands of the classroom, the children of these parents are being equipped at home with the very skills and techniques that are rewarded in the classroom. Likewise, because the language use of low-income parents does not match the discourse of the classroom, low-income children are not being provided with the background knowledge that is so important in the classroom. This match/mismatch idea has been influential in explaining the school success of students from middle-income families and the lack of success of students from low-income families, especially those from linguistic minority backgrounds.

Furthermore, parents' definition of their role in the education of their children is part of the implicit socialization process. In comparing parent participation in schools across low-income and middle-income families, Lareau (1989) found that parent involvement was linked to the social and cultural resources available to parents in different social class positions. Lower-class parents had limited time and disposable income to intervene in their children's schooling; middle-income parents, on the other hand, had the resources to become involved.

Explicit Socialization and School Success

Although both lower-class and middle-class parents want their children to succeed in school, their social circumstances lead them to deploy different strategies to achieve that goal. Lareau (1989) found that the strategy deployed by lower-class parents — depending upon teachers to educate their children — did not promote success. Middle-income parents did not leave the education of their children to the school. These implicitly learned socialization practices appear to give middle-class students advantages over their lower-class counterparts. These subtle and often implicit aspects of social class have been called "cultural capital" (Bourdieu, 1977; Bourdieu & Passeron, 1977), a coin of the educational realm which is spent effectively by well-to-do families, but which is less available to low-income families.

All families, regardless of social class background, have cultural knowledge or cultural capital, which they pass on to their children. The cultural

knowledge passed on to children in middle-income and high-income families maps onto the knowledge expected of them in school, while the knowledge passed on by low-income families does not. Perhaps because they have been to college themselves, well-to-do parents know what is expected of their own college-bound children concerning courses of study, study habits, and the importance of tests. Probably because they have resources of money and time, middle-income parents can take an active and socially approved way of intervening in their students' school careers.

The relationship among implicit socialization, cultural capital, and academic success has particular relevance for the students in this study. The linguistic and ethnic minority students who have been untracked (i. e., placed in academically rigorous college prep programs) most often come from low-income families. As a result, they have not been immersed in the implicit socialization process that accrues to the sons and daughters of more well-to-do families.

Based on our admittedly preliminary observations in schools and interviews with students and teachers, it appears to us that the untracking programs we are studying are engaged in an explicit socialization process that parallels the implicit socialization process that occurs in well-to-do families. Whether intentionally or unintentionally, AVID explicitly teaches the implicit culture of the classroom and overtly exposes students to the hidden curriculum of the school.

The key ingredient in this process is the AVID classroom. Students who have been selected into the AVID program devote one academic period a day to an AVID course, often in lieu of an extra-curricular activity or an elective course. AVID students are taught how to read a book: not simply how to link sounds with letters, but how to interpret and analyze texts. That is, they learn how to extract the main idea, find supporting evidence, and summarize and synthesize information. They are also taught techniques and strategies for writing essays in English, history, and social studies. Test-taking skills are strongly emphasized. Students are provided explicit instruction about how to eliminate distracting answers on multiple choice questions, and they learn strategies for approximating answers, and probabilities about the success of guessing.

"Interactional scaffolding" (Wood, Bruner, & Ross, 1976) — the principle that the development of learning begins in social interaction with an adult as a guide until the students internalize the kind of help received from the adult and guide themselves — operates as well. AVID students are given academic and social support by their tutors and program coordinator. They often work in collaborative groups on a common subject such as algebra or biology. It is the responsibility of classroom aides to provide intensive tutorials in the coursework of the AVID students. Students are taught strategies for approaching faculty when they are having difficulty in class or need assistance or clarification. Collaborative grouping exploits peer learning principles: More capable peers benefit from teaching less capable peers, while less capable peers benefit from positive role models.

We cannot overlook the role of the AVID coordinator. Finn (1991), in an otherwise scathing critique of public education, singles out for praise those special teachers (like Jaime Escalante) who do not confine their definition of education to classroom hours. In the schools we have observed, AVID coordinators spend many hours before school with parents, long hours after school with students in tutorial programs, and on weekends taking them to colleges and universities. Typically, AVID coordinators bring college recruiters to their high school, obtain college application and scholarship forms, and assist students in filling them out and filing them on time. By expanding the definition of their teaching role to include being a mediator between students and the school system, AVID coordinators encourage success and help remove impediments to students' academic achievement.

The idea that explicit socialization in the implicit culture of the school is responsible, at least in part, for the academic success of AVID students is rein-

forced when we re-examine our data on students' college enrollment and parents' educational and income levels. (See Figures 9, 10, and 11.) Bourdieu (1977) and Lareau (1989) suggest that middle-income families pass on advantages to their children that are not matched by low-income families. We have found that untracked students from families with low incomes and low educational levels enroll in college as frequently as untracked students from families with high incomes and high educational levels. Therefore, it seems that AVID gives low-income students the cultural capital at school that is equivalent to the cultural capital that more economically advantaged parents give to their children at home.

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Students from underrepresented ethnic and linguistic backgrounds who participated in the San Diego untracking experiment are enrolling in college in numbers that exceed local and national averages. Fifty percent of the untracked students who graduated in the classes of 1990 and 1991 enrolled in four-year colleges. This figure is higher than the local average of 38% and the national average of 39%. The untracking experiment works evenly across SES and ethnic lines. Students from all underrepresented groups enroll in college in numbers that exceed local and national averages. More students from the lowest SES quartile enrolled in college than students from upper-income groups.

This study, although preliminary, points to the power of academically oriented programs for the academic improvement of previously underachieving students. When previously low-achieving students are placed in academically rich environments, they show significant improvement. If these findings stand up under closer scrutiny, we can conclude that rigorous academic programs can serve the educational needs of low-achieving students better than remedial, compensatory education programs.

What are the reasons for the success of this untracking experiment? In order to answer that question, we looked first at curricular and instructional practices. AVID places previously low-achieving students in rigorous academic courses. It is axiomatic that kids cannot go to college if they do not enroll in college prep classes. But enrolling in college prep classes is not enough. Students must do well in them. In order to ensure the academic success of previously low-achieving students, schools must provide them with a system of social supports.

We think that the success of the San Diego untracking experiment is due to the fact that students' academic life in school is mediated by dedicated teachers who teach study skills, test-taking strategies, and other dimensions of the hidden curriculum. In other words, the program teaches explicitly in school what middle-income students learn implicitly at home. By providing explicit instruction in the hidden curriculum, the school gives students some of the cultural coinage to spend that middle-income parents dispense to their children at home. In short, the placement of low-achieving students in rigorous academic programs is an important ingredient in the success of AVID. Equally, if not more important, are the social and organizational arrangements surrounding student placement in college prep courses.

In fact, unless students receive these social and academic supports, untracking may be a disaster. Heterogeneous grouping and cooperative learning are being touted as the newest panacea for students' achievement problems. For example, a recent report from the U.S. Department of Education (Knapp & Turnbull, 1990) recommends that teachers of "disadvantaged students" emphasize higher order tasks, and meaning and understanding in academic tasks, and that they employ a combination of teacher-directed and learner-directed instruction and more flexibility in grouping arrangements. While these are commendable recommendations, and stand in stark contrast to the conventional wisdom we summarized at the outset of this paper, the authors devote scant attention to the "transportation problem," i. e., how to get students from here (compensatory and remedial instruction) to there (rigorous academic instruction). In order to ensure that previously low-achieving

students succeed in demanding courses, we must pay an equal amount of attention to the hidden curriculum of the school and provide the social support systems that will help students adapt to these new, rigorous academic arrangements.

If students do not succeed in these new arrangements, then skeptics will have a new round of ammunition to fire at the placement of low-income and underrepresented students in academic programs. To blunt that criticism, it appears necessary to treat the academic success of low-achieving students as a schoolwide issue, because researchers who have studied educational reform (Cuban, 1986; Sarason, 1982) have shown that educational innovations have the greatest chance of success when significant portions of the school culture are mobilized.

While we feel comfortable saying that students' background characteristics do not explain their academic success in untracking programs, before we accept the explicit socialization account uncritically, we must consider the influence of school policies and practices. It may be that the untracking experiment is successful in college placement because it preselects a special group of students. The choices that students make themselves may also be influential in their success. They may be faced with competing interests or demands that cause them to leave AVID. For example, their families may move away, or they may have schedule conflicts with desirable extracurricular activities or a needed after-school job.

Before we accept the explicit socialization hypothesis then, we need to explore the impact of program selection and retention policies and the influence of demands and constraints on students' lives. Unfortunately, the information needed to address those issues is beyond the scope of this quantitative phase of our study. We need firsthand observations in order to understand how instructional practices interact with selection practices and students' choices.

We are entering a new, more ethnographic phase of our project which will give us insight into these relationships. We are observing classroom instruction and interviewing participants in the AVID program at a small number of high schools. The ethnographic information we collect will enable us to say more about the social processes that contribute to students' academic success.

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